

Relief Valves for Gas & Cryogenic Systems

9400 Series Brass or Stainless Steel, Non-ASME

Application

These relief valves are specifically designed for thermal safety relief applications and cryogenic liquid containers.

Features

- All valves are cleaned and packaged for oxygen service per CGA G-4.1.
- Bubble tight at 95% of set pressure.
- Easy to read color coded psig / bar labels.
- Unique tamper resistant adjusting screw.
- Adapters provide standard pipe thread connections for venting gas to the outdoors.
- Repeatable performance.
- 100% factory tested.
- Temperatures Range -320° to +165° F.

Materials

	SS Style	PRV and B-Style
Body	Stainless Steel.....	Brass
Spring	Stainless Steel.....	Stainless Steel
Seat Retainer	Stainless Steel.....	Brass
Adjusting Screw	Stainless Steel.....	Brass
Pipe-Away Adapter	Stainless Steel.....	Brass

Flow Performance

- PRV and SS style flow at 0.783 SCFM Air/PSIA at 110% of set pressure.
- B-9425N has a flow of 6.7 SCFM Air/PSIA at 120% of set pressure.
- B-9426N has a flow of 11.0 SCFM Air/PSIA at 120% of set pressure

Style and Size

Style	Size	Inlet A	Body and Valve Material	Pressure Setting Range PSIG	Height B	Wrenching Hex C	Orifice Size Sq. Inch	Pipe-Away Adapter P/N	Pipe-Away Outlet F.N.P.T.
PRV	9432	1/4"	Brass	17-600	2.6	7/8"	.062	B-9412-2	3/8"
SS	9432	1/4"	Stainless Steel	17-600	2.6	7/8"	.062	SS-9412-4	1/2"
PRV	9433	3/8"	Brass	17-600	2.6	7/8"	.062	B-9412-2	3/8"
SS	9433	3/8"	Stainless Steel	17-600	2.6	7/8"	.062	SS-9412-4	1/2"
PRV	9434	1/2"	Brass	17-600	2.8	7/8"	.062	B-9412-4	1/2"
SS	9434	1/2"	Stainless Steel	17-600	2.8	7/8"	.062	B-9412-4	1/2"
B-	9425	3/4"	Brass	50-300	3.4	1 3/4"	.43	B-3131-10	1"
B-	9426	1"	Brass	100-300	5.5	2 3/8"	.62	B-3132-10	1 1/4"

Seat Material Option

F for Fluorosilicone for PRV and SS styles for 15-139psi.

T for PTFE for PRV and SS styles for 140-600psi

N for B-9425 and B-9426, Fluorosilicone seat, all set pressures.

Drain Hole Option

Relief valves without pipeaway typically provided with drain holes, leave blank. **P** - for relief valves without drain hole, for example PRV9432TP350

WARNING: Inspection and maintenance of pressure relief valves is very important. Failure to properly inspect and maintain pressure relief valves could result in personal injuries or property damage. The useful safe service life of a pressure relief valve may be significantly affected by the service environment.

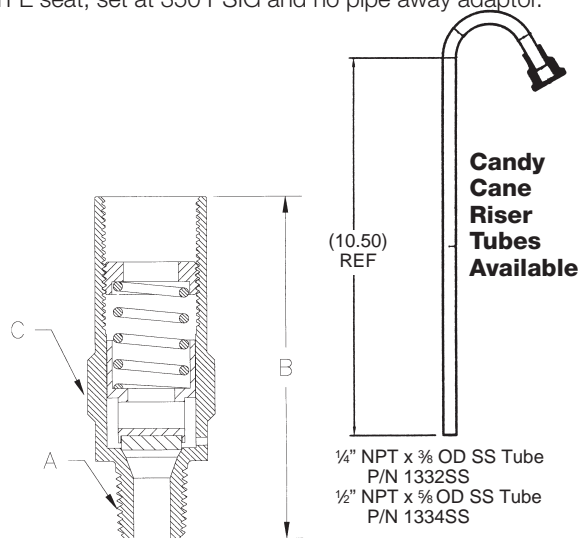
Ordering Information

Fill in the blanks with options below.

Example:

PRV	9432	T	Blank or "P"	350	Blank or "P"
Style	Size	Seat Material	Drain Hole	Set Pressure	Pipe Away Option

This example part number indicates a 1/4" PRV style brass relief valve with PTFE seat, set at 350 PSIG and no pipe away adaptor.



Set Pressure

Specify set pressure within range specified for style and size. The B-9426N is available in select settings only. Special order.

Pipe Away Option

P- Pipeaway included and attached, No drain hole in relief valve. For example PRV9432TP350P

Leave blank for relief valve without pipe-away attached.

For example PRV9432T 350.

For easy identification, the following standard settings have color coded labels for all PRV and SS Style sizes and settings marked in PSIG and bar:

22 psig	yellow	230 psig	blue
35 psig	purple	350 psig	orange
50 psig	white	500 psig	light blue
100 psig	gray	450 psig	pink
150 psig	red		

ASME Relief Valves for Gas & Cryogenic Systems

PRV 19430 Series Brass Relief Valves PRV 29430 Series Stainless Steel Relief Valves

Application

These relief valves are designed for oxygen and other industrial gases and for cryogenic service. Apply on piping systems, liquid cylinders or mini-bulk cryogenic containers where an ASME relief valve is desired.

Features

- A.S.M.E. rated, National Board Certified.
- Bubble tight at 95% of set pressure.
- Full flow at 110% at set pressure.
- Repeatable performance.
- Unique tamper-resistant adjusting screw.
- 100% factory tested.
- Temperatures Range -320° F to 165° F.
- Cleaned and packaged for oxygen service per CGA G-4.1.

Materials

SpringStainless Steel
Body, valve parts, and seat as shown in part number.

Flow Performance

PRV19430 and PRV29430 Series: 0.783 SCFM of air per psia of flow pressure. Flow pressure per ASME is 10% above set pressure.

Ordering Information

Fill in the blanks with options listed below.

Example:

PRV					
Style	Material and Inlet size	Seat Material	Drain Hole	Set Pressure	

Material and Inlet Part Number Options

19432 for Brass 1/4", **19433** for Brass 3/8", **19434** for Brass 1/2",
29432 for SS 1/4", **29433** for SS 3/8", **29434** for SS 1/2".

Seat Material

F for Fluorosilicone for 90 to 139 psig set.
T for PTFE for 140-600 psig

Drain Hole

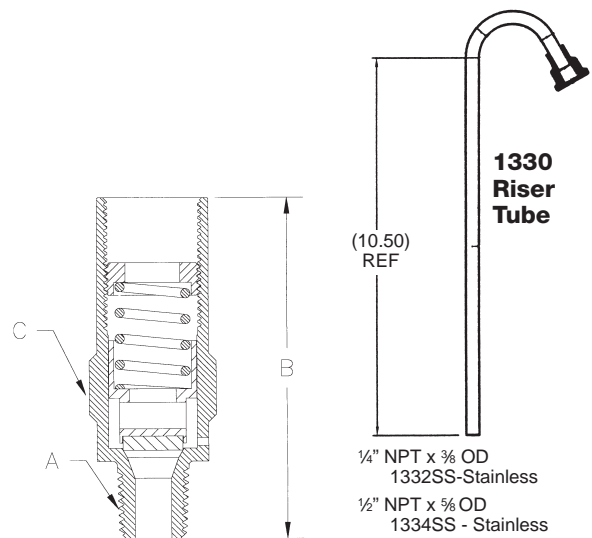
Leave blank for relief with drain hole. Insert **P** if no drain hole.

Set Pressure

Enter number for set pressure in PSIG from 90 to 600.

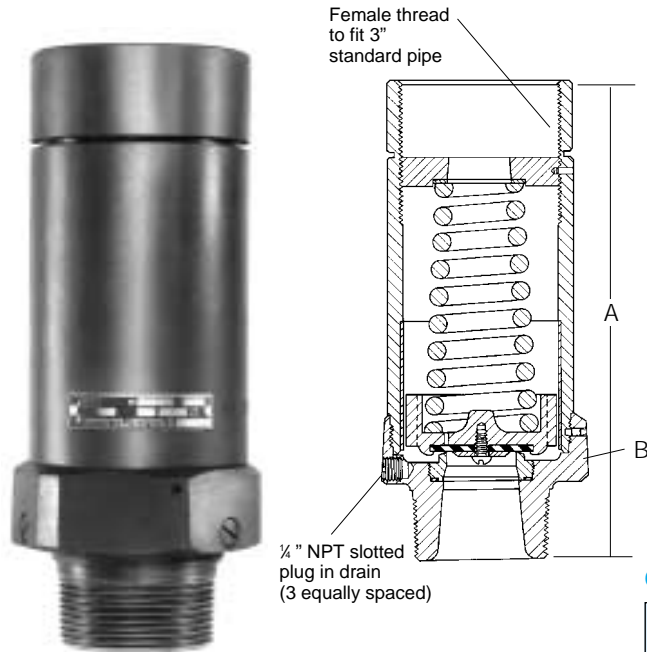
Ordering Information

Models	Inlet	Height	Wrenching Hex	Orifice
	A	B	C	Size
PRV 19432 and PRV29432	1/4"	2.6"	7/8"	.062 sq. inch
PRV 19433 and PRV29433	3/8"	2.6"	7/8"	.062 sq. inch
PRV 19434 and PRV29434	1/2"	2.8"	7/8"	.062 sq. inch



ASME Carbon Dioxide Relief Valves

UA3149A Series



*Capacity certified by National Board of Boiler and Pressure Vessel Inspectors at 10% above set pressure.

Application

The UA3149A series "pop-type" relief valves are especially designed for use as a secondary relief valve in carbon dioxide transports and stationary storage tanks. The relief valve is designed to protect the tank from excessive over pressure in the event of fire or other emergencies. A small throttling-type primary relief valve must also be provided to control boil-off and maintain tank pressure. Provisions must be made to prevent the accumulation and build-up of water and foreign material in the valve.

Features

- "Pop-type" design permits the relief valve to open slightly to relieve moderately excessive pressures.
- Relief valve "pops" open to full discharge capacity when pressure exceeds a predetermined point.

Materials

Body	Steel and Ductile Iron
Liner	Stainless Steel
Seat Insert	Stainless Steel
Spring Guide	Brass
Adjusting Screw	Ductile Iron
Seat Disc	Urethane Compound
Spring	Corrosion Resistant Steel

Ordering Information

Part Number	Pressure Setting (PSI)	Flow Capacity (SCFM/Air)	Inlet Connection (M.NPT)	Height A	Wrenching Hex B
UA3149A303	303	9,805*	2½"	10½"	4⅛"
UA3149A330	330	10,188*			
UA3149A358	358	11,601*			

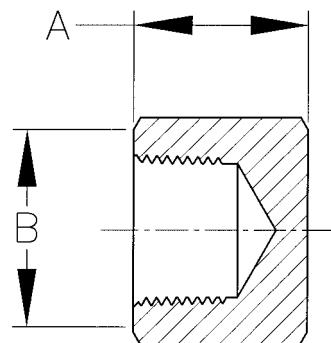
Brass Pipe Caps

Application

For capping cryogenic tank piping or gas pipelines.

Features

- Machined from brass.
- For 600 psig maximum working pressure service.
- Part number stamped on cap.
- Cleaned for oxygen per CGA G-4.1.



Ordering Information

Part Number	Thread Connections	Dim. A	Dim. B	Dim. C
CAP750	¾" Female NPT	1.250"	1.313"	1.313"
CAP1000	1" Female NPT	1.500"	1.750"	1.750"
CAP1500	1 ½" Female NPT	1.750"	2.375"	2.375"
CAP2000	2" Female NPT	2.000"	3.250"	3.250"

ASME Relief Valves for Gases & Cryogenic Systems

B-19434B Series

C-19434B Series

Application

The B-19434B Series relief valves are suitable for use with oxygen and non corrosive gases.

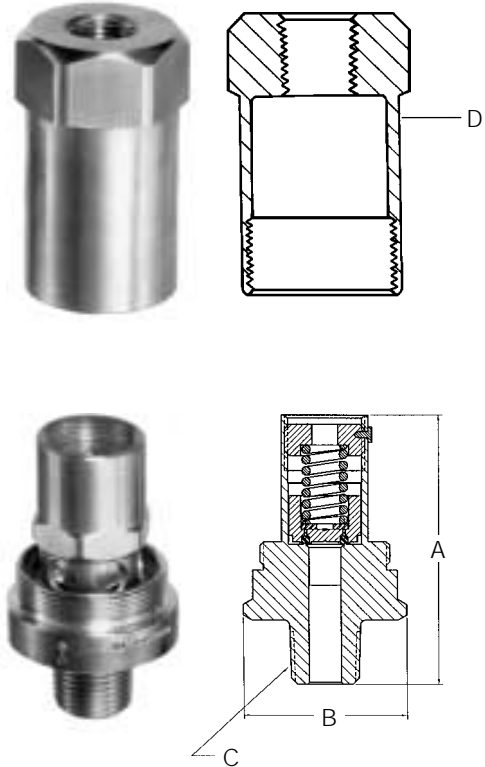
The C-19434B series relief valves are designed for use in carbon dioxide service.

Features

- Both designs permit the valve to open slightly to relieve moderately excessive pressure.
- When the pressure increases beyond a predetermined point, the valve opens to its full discharge capacity in order to quickly reduce excess pressure.
- Pipe-away adapter for venting gas to the outdoors is available.
- A.S.M.E. rated. NB Certified.
- B-19434-B Series are cleaned for use in oxygen per CGA G-4.1.

Materials

Body.....Brass
 Spring.....Stainless Steel
 Seat Retainer.....Brass
 Seat Disc (B-19434B Series).....Fluorosilicone
 (C-19434B Series).....EPDM Synthetic Rubber
 Pipe-Away Adapter.....Brass



Ordering Information

Part Number	Pressure Setting (PSIG)	ASME Relief Capacity (CFM/Air)	Height A	Width B	Inlet Connection (M.NPT) C	Pipe-Away Adapter Part Number D
B-19434B235	235	476	2 ¹⁵ / ₁₆ "	1 ³ / ₄ "	1/2"	*B-19434-5 1/2" F.NPT Outlet
B-19434B250	250	505				
B-19434B300	300	601				
B-19434B350	350	691				
B-19434B375	375	736				
C-19434B235	235	476				
C-19434B250	250	505				
C-19434B280	280	555				
C-19434B300	300	601				
C-19434B350	350	691				
C-19434B375	375	736				

* Pipe Away Adapter is sold separately.

** Contact factory for additional settings.